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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,472	03/24/2004	Gerhard Vollmar	MP.-NR. 01/603	1762
24131	7590	09/28/2006	EXAMINER	
LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480			BONURA, TIMOTHY M	
			ART UNIT	PAPER NUMBER
			2114	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/811,472	<b>Applicant(s)</b> VOLLMAR ET AL.	
	<b>Examiner</b> Tim Bonura	<b>Art Unit</b> 2114	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/26/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

- **Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tong, et al, U.S. Patent Number 5,272,704 and further in view of Tsuyama, et al, U.S. Patent Number 5,596,712.**

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tong, et al, U.S. Patent Number 5,272,704 and further in view of Tsuyama, et al, U.S. Patent Number 5,596,712.

4. Regarding claim 1:

- a. Regarding the limitation of "method for automated processing of fault hypotheses in a course of a fault cause analysis in a case of a fault event in a technical installation," Tong discloses a system with an analysis engine to build a fault tree based on system test measurements. (Lines 6-10 of Column 6). Tong does not disclose a system that

can hypothesizes a fault due to a technical installation. However, Tsuyama disclose a system with a fault tree that can be based in part on installation information. (Lines of 57-65 of Column 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the fault analysis system of Tong with the fault tree analysis system of Tsuyama. One of ordinary skill in the art would have been inclined to combine the prior art because Tong discloses that the system in which data can be enter into the system for a better model for diagnosis. (Lines 53-56 of Column 6). Tsuyama fulfils this need by allowing installation information of the system to be used to diagnosis fault conditions.

b. Regarding the limitation of "providing a data processing system which uses knowledge-based models for the fault cause analysis and physical models of installation functions and processes carried out by the technical installation, the data processing system having first means for calculating and storing installation and process states and the first means having access to the physical models and to data relating to the technical installation stored in a data server, the data processing system further having second means for hypothesis processing and an input/output device," Tsuyama discloses a system that can use installation information (Lines 57-65 of Column 10) to help build a fault tree representing causal relations between faults and cause of the faults in a true structure on the basis of information concerning the structure and characteristics of the system. (Lines 20-26 of Column 2).

c. Regarding the limitation of "determining, through a user of the data processing system, an existence of a fault hypothesis," Tsuyama discloses a system with fault information being entered into the fault tree search with a determination being made of the fault. (Lines 35-40 of Column 2).

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- d. Regarding the limitation of “accessing, through the second means for hypothesis processing, results of a calculation of the installation and process states and accessing a checklist of the knowledge-based models for automatically verifying the fault hypothesis on a basis of conditions associated with checklist items in the checklist,” Tsuyama discloses a system with supplying the information to a host computer from the fault tree data base, and a statistical analysis occurring on the data. (Lines 40-50 of Column 2).
  - e. Regarding the limitation of “entering a verification result for each checklist item in a result list,” Tsuyama discloses a system in which analysis of the information from the database occurs based on the quality of the information entered. (Lines 47-50 of Column 2).
  - f. Regarding the limitation of “outputting the result list,” Tsuyama disclose in which an alert can be sent out to a technician with the proper diagnosis for quick repair. (Lines 36-40 of Column 3).
5. Regarding claim 2:
- g. Regarding the limitation of “a system for automated processing of fault hypotheses in a course of a fault cause analysis in a case of a fault event in a technical installation,” Tong discloses a system with an analysis engine to build a fault tree based on system test measurements. (Lines 6-10 of Column 6). Tong does not disclose a system that can hypothesizes a fault due to a technical installation. However, Tsuyama disclose a system with a fault tree that can be based in part on installation information. (Lines of 57-65 Column 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the fault analysis system of Tong with the fault tree analysis system of Tsuyama. One of ordinary skill in the art would have been inclined to combine the prior art because Tong discloses that the system in which data

can be enter into the system for a better model for diagnosis. (Lines 53-56 of Column 6). Tsuyama fulfils this need by allowing installation information of the system to be used to diagnosis fault conditions.

h. Regarding the limitation of "a data server storing data relating to the technical installation; a data processing system processing knowledge-based models for the fault cause analysis and physical models of technical installation functions and processes which can be carried out by the technical installation," Tsuyama discloses a system that can use installation information (Lines 57-65 of Column 10) to help build a fault tree representing causal relations between faults and cause of the faults in a true structure on the basis of information concerning the structure and characteristics of the system. (Liens 20-26 of Column 2).

i. Regarding the limitation of "first means for calculating and storing installation and process states, said first means having access to the physical models and to the data stored in said data server for the technical installation," Tsuyama discloses a system with supplying the information to a host computer from the fault tree data base, and a statistical analysis occurring on the data. (Lines 40-50 of Column 2).

j. Regarding the limitation of "second means for hypothesis processing," Tsuyama discloses a system in which analysis of the information from the database occurs based on the quality of the information entered. (Lines 47-50 of Column 2).

k. Regarding the limitation of "an input/output device connected to said second means for hypothesis processing," Tsuyama discloses a system with fault information being entered into the fault tree search with a determination being made of the fault. (Lines 35-40 of Column 2).

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6. Regarding claim 3, Tsuyama discloses a system with supplying the information to a host computer from the fault tree database, and a statistical analysis occurring on the data. (Lines 40-50 of Column 2).

### ***Specification***

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tim Bonura**.

- The examiner can normally be reached on **Mon-Fri: 8:30-5:00**.
- The examiner can be reached at: **571-272-3654**.

9. If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, **Scott Baderman**.

- The supervisor can be reached on **571-272-3644**.

10. The fax phone numbers for the organization where this application or proceeding is assigned are:

- **703-872-9306 for all patent related correspondence by FAX.**

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **receptionist** whose telephone number is: **571-272-2100**.

13. Responses should be mailed to:

- **Commissioner of Patents and Trademarks**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

Tim Bonura  
Examiner  
Art Unit 2114

September 25, 2006

A handwritten signature in black ink, appearing to read 'Tim Bonura', followed by a long horizontal flourish.